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ABSTRACT

Guidelines to facilitate the assessment and development of educational leadership decision-making skills are presented in this paper. Included are a review of traditional and contemporary concepts of the decision-making process, identification of appropriate techniques, and an analysis of four contemporary decision-making models by Thompson, Kassouf, Radford, and Grandori. Focussing on decisions that are not completely specified, a comparison of the four systems demonstrates much similarity between them. A conclusion is that contemporary decision-making models are characterized by recognition of different decision situations and diverse environmental factors, inclusion of subjectivity, and emphasis on information gathering. These models also require that the administrator make a concerted effort to analzye and refine the technical skills needed to make optimal use of the new decision making tools now becoming available in the field. Five tables are included. (10 references) (LMI)

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Deciding to Decide:

Structuring Decision Situations

and

Selecting Decision Strategies

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Introduction

The demanding and ever-changing milieu of American education requires that today's educational leader possess a wide array of technical skills. Chief among these skills, many argue, is proficiency in decision making (Miller, 1959, Joseph, 1975, Hoy & Miskel, 1978, Beach, 1984, Heller & Lundquist, 1984). While the importance of skilled decision making in educational administration is well recognized and agreed to, consensus is changing in regard to decision models, types of decision, and strategies of choice. That is, like the field of education generally, the subject of decision making is undergoing continual reconceptualization and testing. The contemporary educational administrator is obligated, given the importance of the decision making function, to remain aware of developments which will enhance his or her abilities in this area (Hoy & Miskel, 1978, p. 226). This paper is intended to facilitate the efforts of today's educational leader to assess and develop his or her decision making skill.

The paper is divided in to two sections. The first section will review traditional and contemporary concepts of the decision process. The second section of the paper will discuss decision classification systems and identify appropriate decision techniques. There should emerge from the material presented guidelines which the educational administrator will find useful in assessing and upgrading his or her decision making skills.

Traditional and Contemporary Decision Models

Decision making in educational administration has traditionally been viewed as a rational process involving five basic steps. This traditional conception of the decision process is well known and appears frequently in the basic texts used for training educational administrators (e.g., Hoy & Miskel, 1978, Knezevich, 1984). The traditional decision process involves 1) recognition and definition of a problem or decision situation, 2) analysis of the difficulties associated with the situation, 3) establishment of criteria for resolution, 4) development of a plan, and 5) initiation of the plan. (Hoy & Miskel, 1978, p. 213). This scheme is summarized in Table 1.

TABLE 1

Traditional Decision Model

Summary

Step	Activity
1.	Identify the problem
2.	Identify the alternative solutions
3.	Evaluate the alternative solutions
4.	Select a solution
5.	Implement the selected solution

The traditional decision process serves several useful functions. For example, the traditional decision process places a premium on objective information. Perhaps most importantly, however, the traditional decision process brings an element of rationality to the decision function. That is, the traditional decision process provides a structure wherein decision making behavior can have logical consistency (Kassouf, 1970, Radford, 1975). Despite the usefulness of the traditional decision process there may be difficulties associated with it if used in every decision situation encountered by the harried educational administrator.

Discussion and analysis that typically accompanies a presentation of the traditional decision process tends to treat the decision function in administration as a monolithic, unvarying event (cf., Hoy & Miskel, 1978, Knezevich, 1984). Most administrators will recognize, however, that all decision situations are not alike and so cannot be treated in a uniform manner. To illustrate, consider the superintendent confronted with two decision situations: The first situation involves deciding whether to recommend the dismissal of a tenured teacher; the second situation involves deciding whether to approve a request by a community group to use school facilities. Are these equivalent decision situations? Should each be treated in an equal fashion? Undoubtedly, most would respond in the negative to both questions.

To not treat all decisions in a monolithic fashion is receiving ever-increasing support in the research literature of educational administration and other fields (Mellor, 1976, Grandori, 1984, Heller & Lundquist, 1984). A clear summary of the

contemporary conceptualization of administrative decision making is provided by Radford (1975):

> Two important factors in managerial decision making are the concepts of rationality and personalistic involvement in the process. Decision processes in which there is no personalistic involvement at the time of resolution and where the resolution is rational are called 'completely specified.' Most of the more routine decision processes in an organization can be completely specified... The non-specified decision processes are those in which the manager is involved at the time of each resolution. His approach to those processes is colored by his experience, judgement and beliefs. (p. 26)

From Radford's statement we can readily recognize the two principal elements of the contemporary view of administrative decision making. First, all decision situations are not the same and so should not be treated in the same manner. Second, not all decisions can be made in a wholly rational manner. While routine decisions (e.g., approval of requests to use school facilities) can be made in a rational manner and may remain in lower levels of the administrative structure, major decisions (e.g., recommending dismissal of a tenured teacher) will require choice based on personal values and will likely rise to the top of the administrative structure.

While the contemporary conceptualization of the decision process more closely reflects the true nature of administrative decision making, it has led to the development of a variety of decision classification schemes and strategies appropriate to each class of decision. The following section of this paper will identify and review these schemes and strategies so that they may be applied to decision situations in education. Before proceeding, however, a recapitulation of

the major elements of the traditional and contemporary models of administrative decision making is provided in Table 2.

TABLE 2

Traditional and Contemporary Decision Models

Summary of Elements

Traditional	Contemporary
Rational, five-step process used for all decision situations	Rational process used but specific strategy depends upon category into which decision situation falls
Monolithic - all decisions treated by same process at all administrative levels	Variegated - decision situations fall into different categories and and each category has appropriate decision strategy; each decision category has appropriate level in administrative structure
Objectivity assumed in all steps of all decision situations	Subjectivity recognized as necessary in some decision situations
Appropriate for routine decision situations	Appropriate for nonroutine decision situations

Types of Decisions and Strategies for Deciding

In the preceding section it was noted that decisions, according to the contemporary view, fall into two categories - those completely specified and those not completely specified. Completely specified decisions are not the concern of

this paper since, by their very nature, they involve but one possible outcome and are so routine that they can and should be dealt with by lower levels of the administrative structure (Radford, 1981, pp. 6-7). Decision situations that are not completely specified will be the focus of this section for two reasons. First, such decisions are nonroutine and generally involve the most important issues coming before the organization (Radford, 1981, p. 7). Second, such decisions are receiving increasing attention in the literature of both practitioners and academics. An attempt will be made to summarize the prevailing thought in this area. The discussion of decisions which are not completely specified will be limited to four authors, each of whom proposed a system for classifying decision situations and strategies for arriving at decisions for each class of decision.

One of the earliest works to identify both a system for classifying decisions and strategies for dealing with each class of decision was that by Thompson (1967). Thompson maintained that "the basic variables of decision (are)... (1) beliefs about cause/effect relations and (2) preferences regarding possible outcomes" (p. 134). Depending on the degree of certainty the decision maker can feel about each of the "basic variables of decision", Thompson identified four types of decisions. The types of decisions identified by Thompson are summarized in Table 3.

TABLE 3

Types of Decisions
(Thompson, 1967, p. 134)

		Preferences Regarding Possible Outcomes	
		certain	uncertain
Beliefs About Cause/Effect	certain	cell 1	cell 2
	uncertain	cell 3	cell 4

Thompson did not identify the four types of decisions by name but rather by cell number. Cell 1 decisions are those in which the decision maker is certain about the cause and effect relation of the situation and about his or her preferences as to possible outcomes. In Cell 2 decision situations the decision maker is certain about cause and effect but is unsure as to which is the best possible outcome in the situation. Cell 3 decisions involves uncertainty about why the situation occurred and its effect on the organization, but certainty as to the preferred outcome. Finally, Cell 4 decisions involve uncertainty about both cause and effect and the options available in the situation.

Thompson argued that the closer a decision situation comes to Cell 1 the greater should be the extent to which the decision is delegated to lower levels of the organization for resolution by way of routine and procedure. Conversely, the

closer a situation approaches Cell 4 the higher in the organization should the decision be made (Thompson, 1967, pp. 134-135). These strategies are:

Types of Decision	Strategy
Cell 1	computational
Cell 2	judgement
Cell 3	compromise
Cell 4	inspirational

Unfortunately, only the computational strategy was defined. The computational strategy involves quantitative decision methods based on mathematical models (e.g., linear programming, operations research). Thompson's reader was left to interpret what is involved in judgmental, compromise, and inspirational strategies.

Subsequent work in the field of decision theory has made considerable use of the basic decision variables identified by Thompson. Kassouf (1970) and Radford (1975) made extensive use of the concept of certainty in developing their respective decision classification systems. Since the works of Kassouf and Radford are so similar they will be discussed in combination herein.

Like Thompson, Kassouf and Radford proposed four types of decision situations. These four decision types are summarized in Table 4.

TABLE 4

Types of Decisions
(Kassouf, 1978, Radford, 1975)

1. Decision under certainty	All options are known, each option has but one outcome
2. Decision under risk	All options are known, each option has more than one outcome, decision maker knows the probability of occurrence of outcome of each option
3. Decision under uncertainty	Not all options are known, not all outcomes for each option are known, decision maker cannot determine probability of occurrence of outcome of each option
4. Decision under competition	Situation involves an opponent whose objectives are in conflict with those of the decision maker and his/her organization.

The Kassouf and Radford types of decisions share two characteristics with those of Thompson. First, the more the conditions of a decision situation move from certainty toward conditions of uncertainty and competition, the higher in the organizational hierarchy must the decision be made.

Unlike Thompson, however, the Kassouf and Radford classifications of types of decisions are accompanied by very explicit decision strategies. The strategies identified are specific to the conditions inherent in each type of decision situation. Table 5 provides a synopsis of the strategies assigned to each type of decision identified by Kassouf and Radford.

TABLE 5

Decision Strategies Appropriate
To Different Decision Situations
(Kassouf, 1970, Radford, 1975)

Type of Decision	Decision Strategy	Strategy Characteristics
1. Under certainty	linear programming critical path analysis, inventory management	quantifiable; objective function; option with highest value selected
2. Under risk	subjective expected utility	quantifiable; subjective function; option with highest value selected
3. Under uncertainty	minimax, maximin, maximax, criterion of regret, satisfice	nonquantifiable; subjective function; option selected upon assumptions of pessimism or optimism
4. Under competition	principle of indifference metagame, zero sum game, nonzero sum game	nonquantifiable; subjective function; option selection may be random choice or choice based on negotiation

While most educational administrators recognize that decision making involves subjectivity in the form of judgment, preference, and valuing, emphasis must be placed on the existence of strategies which will help structure the decision process and provide greater confidence in the final decision.

The final decision classification scheme to be considered is that proposed by Grandori (1984). In the Grandori classification, five types of decisions are identified along with appropriate decision strategies. The five types of decisions identified by Grandori - optimizing, satisficing, incrementalism, cybernetics, and random - are summarized in Table 6.

TABLE 6

Types of Decisions
(Grandori, 1984)

	Type	Characteristics	Strategy
1.	Optimizing	all alternatives and consequences known, no conflict	select alternative with highest objective value
2.	Satisficing	incomplete knowledge of alternatives and consequences and/or conflict	select alternative that is satisfactory to participants and sufficient for situation
3.	Incrementalism	all relevant alternatives cannot be identified and consequences of each alternative are unpredictable	select alternative that differs only marginally from existing conditions
4.	Cybernetics	all relevant alternatives and consequences cannot be identified, causes of problem cannot be identified	select alternative that appears to have worked in the past under similar conditions - i.e., trial and error
5.	Random	all relevant alternatives and consequences cannot be identified, causes of problem cannot be identified, situation is new to decision maker	select any available alternative

The Grandori classification of decisions closely duplicates the systems proposed by Thompson and Kassouf and Radford. An underlying criterion of the Grandori classification involves the degree of certainty the decision maker can assign the knowledge of causes, alternatives, and consequences. Where certainty is high, objectivity becomes the basis for choice. Conversely, where certainty is low, subjectivity becomes increasingly more dominant as the basis of choice. One point of divergence between Grandori and the schemes discussed earlier is that the former recognizes a category of choice in which there is no objectivity or subjectivity in deciding. In the random decision situation the decision maker is in such a state of uncertainty that any available alternative is acceptable for experimentation.

The work of Thompson, Kassouf, Radford, and Grandori are representative of contemporary conceptualizations of administrative decision making. While each author may approach the decision function in a slightly different manner, there is a remarkable degree of similarity in the final decision classification systems. Table 7 presents a tabular comparison of the decision types reviewed previously.

TABLE 7

Comparison of Types of Decisions
Identified in Contemporary Decision Models

Thompson (1967)	Kassouf (1970 & Radford (1975)	Grandori (1984)
certain/certain	under certainty	optimizing
certain/uncertain	under risk, under competition	satisficing
uncertain/certain	under certainty	incrementalism
uncertain/uncertain	under uncertainty under competition	cybernetics
		random

Decision making under the contemporary view is a function of the degree of certainty with which the decision maker can approach the causes of the situation, the alternatives available, and the consequences associated with each alternative.

Conclusion

A strong case can be made to support the argument that proficiency in decision making is the most important of administrative leadership skills. With so much importance assigned to decision making, awareness of developments which can enhance the quality of educational decision making takes on added significance for today's administrator. This paper has attempted to facilitate such awareness by

distinguishing between traditional and contemporary models of decision making and by reviewing the essential elements of the contemporary decision model. From the foregoing several generalizations emerge. These are:

1. Conceptualizations of the administrative decision making function are undergoing extensive change; new decision technologies are rapidly emerging as a result of these reconceptualizations.

2. The traditional, rational, five-step model of decision making is being replaced by contemporary models which account for the diverse content and environmental factors involved in real life administrative decision making.

3. Contemporary models of decision making recognize different types of decision situations and that the strategy used to make a decision depends upon the type of decision situation encountered.

4. Contemporary models of decision making are like the traditional model in that they provide a process for deciding and in that they place emphasis on information gathering as an important pre-decision step.

5. Contemporary decision models are unlike the traditional model in that they recognize that subjectivity is a necessary component of many administrative decision situations.

6. Contemporary decision models provide the administrator powerful tools for enhancing the quality of the decision making function. These models can guide the administrator in both selecting an appropriate decision strategy and in identifying the appropriate level in the organization at which the decision should be made.

7. Contemporary models of decision making require that the administrator make a concerted effort to analyze and refine the technical skills needed to make optimal use of the decision making tools becoming available through developments in the field.

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